

Claims

1. Arrangement for the wireless connection of terminal devices (HS1, HS2, HS3, PDA) to a communication system, with
 - a) a data packet network (LAN) for the transmission of data packets using network addresses (IP1, IP2) valid within the network,
 - b) at least one transition device (GW1, GW2) coupled to the data packet network (LAN), to which at least one short-range radio module (BT1, BT2) is coupled, with the transition device (GW1, GW2) having a coupling table (KTAB) with terminal device addresses (RN1, RN2, RN3, MA) of terminal devices (HS1, HS2, HS3, PDA) located within the radio range of at least one short-range radio module (BT1, BT2),
 - c) a server (S) coupled to the data packet network (LAN) for controlling connections to the terminal devices (HS1, HS2, HS3, PDA), with the server having an allocation table (ZTAB) in which a network address (IP1, IP2) of the particular transition device (GW1, GW2) is allocated in each case to a terminal device address (RN1, RN2, RN3, MA) of a terminal device (HS1, HS2, HS3, PDA), to which transition device (GW1, GW2) a short-range radio module (BT1, BT2) in whose radio range this terminal device (HS1, HS2, HS3, PDA) is located, is coupled, and
 - d) a packet-based alignment protocol (AP) for the dynamic alignment of the allocation table (ZTAB) with the coupling table (KTAB).
2. Arrangement in accordance with Claim 1, characterized in that,
 - 30 the data packet network (LAN) is realized by a network based on an

Internet protocol.

3. Arrangement in accordance with one of the preceding claims,
characterized in that

5 the transition device (GW2, GW2) has a translator (IWU) for
translation between a network protocol used in the data packet
network and a protocol specific to a radio module.

4. Arrangement in accordance with Claim 3,

10 characterized in that

the translator (GW1, GW2) has a detection device for detecting, by
means of the network protocol used, which terminal device-specific
application a connection to a terminal device (HS1, HS2, HS3, PDA)
is allocated to, in order to be able to perform an application-
15 specific protocol conversion accordingly.

5. Arrangement in accordance with Claim 3 or 4,

characterized in that

the protocol specific to a radio module has a specific voice

20 interface (VOICE) and a specific data interface (DATA).

6. Arrangement in accordance with one of the preceding claims,

characterized in that

a Bluetooth module is used as a short-range radio module (BT1, BT2).

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7. Arrangement in accordance with one of the preceding claims,

characterized by,

a locating device for determining a momentary location of a

particular terminal device (HS1, HS2, HS3, PDA) by means of the allocation table (ZTAB).

8. Arrangement in accordance with one of the preceding claims,

5 characterized by

a gateway device (EXTGW, GSMGW) coupled to the data packet network for coupling the data packet network (LAN) to a forwarding communication network (WAN, ISDN).

10 9. Arrangement in accordance with one of the preceding claims,

characterized by

a headset (HS1, HS2, HS3) as a terminal device for voice connections.

10. Arrangement in accordance with one of the preceding claims,

15 characterized by

a PDA (Personal Digital Assistant) (PDA) as a terminal device for data connections.

11. Arrangement in accordance with one of the preceding claims,

20 characterized by

a PDA (Personal Digital Assistant) (PDA) as a terminal device for entering destination addresses for outgoing connections and for initiating those connections.